



Bureau of Medicine and Surgery Department of the Navy

Sudden Cardiac Arrest (SCA) and Use of Automated External Defibrillators (AEDs)

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Sudden cardiac arrest is a major cause of mortality in the United States. Use of AEDs in the pre-hospital environment has shown a definite reduction in morbidity and mortality from SCA. Congress has proposed legislation (H.R. 2498 – Cardiac Arrest Survival Act of 2000) regarding the placement of automated external defibrillators in Federal buildings.

The use of AEDs at Navy commands is a complex issue, and requires coordination between private sector and/or Department of Defense medical facilities, emergency responders, and fire departments before they are procured and made available for use.

Commands considering procurement of AEDs for their facilities should review the following before taking such action:

1) A close reading of OSHA standard 29 CFR 1910.151 (b) "Medical Services and First Aid", which says *"In the absence of an infirmary, clinic, or hospital in near proximity to the workplace which is used for the treatment of all injured employees, a person or persons shall be adequately trained to render first aid. Adequate first aid supplies shall be readily available."*

Taking this into consideration, commands that are located in near proximity to a medical facility may not need an AED, as first responder teams (9-1-1, Emergency Medical Service, Police or Fire Department) may only be a few minutes away. If a command chooses to have an AED, only qualified trained personnel may operate the unit.

2) Potential liabilities of having AEDs. Commands should research their legal liabilities before purchasing and using AEDs. Current laws surrounding AED usage vary from state to state. Most states have passed or are in the process of updating their Good Samaritan laws to include language about AEDs.

3) AED selection, maintenance, personnel training, and placement of units. Determination of the type of AED and manufacturer should be left to the local commander's discretion. It is recommended, however, that, to the extent possible, all devices within a given "system" or locality should be of the same type and manufacturer, to reduce confusion during utilization. Other factors to consider:

- Periodic maintenance of the AED is required. Commands must determine who will be responsible and pay for maintenance.
- Personnel must be trained, and periodically retrained to operate AEDs. Initial training should meet the recommendations of the American Heart Association, and should be conducted in conjunction with cardiopulmonary resuscitation (CPR) training. An initial four-hour training course is recommended. One-hour refresher training should be conducted quarterly.
- Placement of AEDs in command buildings must be made known to trained personnel. AEDs, due to their expense, should be kept in relatively secure or tamperproof locations, yet be accessible to qualified personnel.

4) Commands that should consider having an AED:

- Military sponsored EMS agencies should have AEDs on all Emergency Medical Transport Vehicles.

- Agencies that routinely provide first response (police and fire services) should have a critical mass of AEDs with personnel proficient in their use.
- Certain fixed facilities in which high risk industrial procedures routinely occur.
- Those with search and rescue functions.
- Those with large gathering areas (arenas, mess halls, cafeterias, auditoriums).